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09/398,378	-	09/17/1999	LEONARD CORNING LAHEY	BO9-99-030	1012
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315 SOUTH SUITE 210			BACHNER, REBECCA M		
BEVERLY	HILLS, C.	A 90212	·	ART UNIT PAPER NUMBER	
				2163	5
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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	***
Office Action Comments	09/398,378	LAHEY ET AL.	(
Office Action Summary	Examiner	Art Unit	
i.	Rebecca M Bachner	2163	
- The MAILING DATE of this communication appeared for Reply	pears on the cover sheet	with the correspondence address	-
A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reg.  - If NO period for reply is specified above, the maximum statutory, period.  - Failure to reply within the set or extended period for reply will, by statut.  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, however, may a ply within the statutory minimum of the will apply and will expire SIX (6) MC (e, cause the application to become and date of this communication, even	reply be timely filed  irty (30) days will be considered timely.  NTHS from the mailing date of this communic	cation.
1) Responsive to communication(s) filed on <u>17</u>			
	his action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice under	ance except for formal ma	atters, prosecution as to the mer	rits is
Disposition of Claims		.5. 11, 400 0.0. 210.	
4) Claim(s) 1-35 is/are pending in the applicatio	n.		
4a) Of the above claim(s) is/are withdra		•	
5) Claim(s) is/are allowed.	nom obnolaciation.		
6)⊠ Claim(s) <u>1-35</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement		
Application Papers	to.		
9)⊠ The specification is objected to by the Examine	٠. ٠		
10)⊠ The drawing(s) filed on 17 September 1999 is/a		objected to by the Examiner	
Applicant may not request that any objection to th			
11)☐ The proposed drawing correction filed on			
If approved, corrected drawings are required in re	ply to this Office action.		
12)☐ The oath or declaration is objected to by the Ex	aminer.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
<ol> <li>Certified copies of the priority documents</li> </ol>	s have been received.		
<ol><li>Certified copies of the priority documents</li></ol>	s have been received in A	pplication No	
<ul> <li>3. Copies of the certified copies of the prior application from the International But</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	•	
14) Acknowledgment is made of a claim for domestic			ation)
a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domesti	visional application has be	een received.	<b>20</b>
) ☑ Notice of References Cited (PTO-892)  ② ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)  ☑ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 c	5) Notice of I	Summary (PTO-413) Paper No(s) nformal Patent Application (PTO-152)	_•
Patent and Trademark Office O-326 (Rev. 04-01) Office Act	tion Summary	Part of Paper N	lo. 5

Art Unit: 2163

#### **Detailed Action**

This is a first office action on the merit. Claims 1-35 are pending.

#### Information Disclosure Statement

1. The examiner has reviewed all the publications in the Information Disclosure Statement (IDS) provided on April 10, 2000.

## Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 16-35 have been renumbered as 17-36. The claims were misnumbered as there were two claim 16. The dependent claims were assumed to be renumbered beginning at the second claim 16 now being claim 17.

### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

Art Unit: 2163

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Flores et al.

As per claim 1, Flores et al. disclose a method for processing a job, comprising: generating a signal when status for the job is changed from a first status to a second status (see column 8, lines 31-315, the workflow transaction sends a signal to communicate to the server telling the database to update the status of the work, also see column 44, lines 35-42, the TxFormatter generates a signal to the STF Transaction that the formatting job is finished, once the workflow is completed the status can be updated);

notifying a work process associated with the second status that one job had its status changed to the second status in response to the signal (see column 1, lines 41-42, and column 14, lines 19-26, the workflow processor is notified when the status changes);

processing, with the work process, the job that had its status changed from the first status to the second status (see column 8, lines 31-35, the workflow

Art Unit: 2163

will be processed after the status is updated from the first status to the second status);

and modifying, with the work process, the status of the job after completing the processing of the job (see column 8, lines 31-35, the status will be modified when the work process job is completed).

As per claim 2, Flores et al. disclose all the limitations of the method of claim 1, wherein the signal is transmitted to a routing process and indicates the second status, further comprising: processing with the routing process a mapping associating each status with one work process in response to receiving the signal (see column 5, lines 26-28, the Business Process Map shows the relationship of the workflows, a signal is transmitted associated with the status of each workflow, when the work process is completed the workflow goes to the next process as shown on the map); and

determining from the mapping one work process associated with the second status, wherein the determined work process is notified of the job (see column 3, lines 62-67, through column 4, lines 1-11, and column 5, lines 26-28, the mapping shows where the next work process occurs, notification occurs throughout any workflow process).

As per claim 3, Flores et al. disclose all the limitations of the method of claim 1, wherein job status is maintained in a database table including information on the job, further comprising maintaining, with the work process, a connection with the database

Art Unit: 2163

that enables communication with the database table, wherein modifying the status of the job after completing processing comprises updating the status of the job to an output status associated with another work process, and wherein updating the status with the output status generates the signal indicating a change in status (see figure 5, column 8, lines 31-60, and column 10, lines 11-18, the workflow actions are communicated to the database and the status is changed, as a result of the action the status is changed and the workflow server is able to output the new status).

As per claim 4, Flores et al. disclose all the limitations of the method of claim 3, wherein the signal is generated by an event trigger in the database that responds to an update to the status of the job in the database table (see column 6, lines 26-31, column 7, lines 4-20, and column 8, lines 31-60, the workflow actions' new status is recorded in a database, the event trigger occurs because of the workflow action).

As per claim 5, Flores et al. disclose all the limitations of the method of claim 3, wherein there are multiple work processes each associated with one input status and at least one output status, wherein each worker is enabled to update the job status with one associated output status after completing the processing of the job, wherein the output status for one worker is the input status associated with one other worker, and wherein the definition of input and output statuses for workers defines the workflow of the job (see figure 5, column 8, lines

Art Unit: 2163

31-60, and column 14, lines 18-25, once a workflow is completed the status is updated and the new output status indicates the beginning of new work processes, the status defines the workflow of the job).

As per claim 6, Flores et al. disclose all the limitations of the method of claim 3, further comprising the work process performing: determining whether the work process completed processing the job successfully (see column 12, lines 27-51, the Act transaction returns whether the job, or act, in the workflow process was successfully completed); and

updating the status of the job to an error status if the work process did not complete processing the job successfully, wherein the status of the job is updated with one output status associated with the work process if the job work process completed processing the job successfully (see column 12, lines 52-67, the Bind Data Transaction returns the successful or unsuccessful status of the workflow instance).

As per claim 7, Flores et al. disclose all the limitations of the method of claim 6, wherein an error worker is associated with the error status, wherein updating the job to the error status causes the notification of the error worker, further comprising the error worker: performing error recovery operations on the job (see column 12, lines 1-9, and column 24, lines 35-40, an error message is

Page 6

Art Unit: 2163

displayed on the screen, an error worker receives this message and must perform error recovery so that the work processes continue);

determining whether the error recovery operations corrected the job (see column 24, lines 35-50, once the error recovery is completed no error notification will be received, the workflow process will continue); and

setting the jobs status of the corrected job to a first possible status in the workflow (see column 24, lines 35-50, the status of the workflow is returned once the error is corrected).

As per claim 8, Flores et al. disclose all the limitations of the method of claim 3, wherein the work process further performs:

querying the database table for jobs having the status associated with the work process (see figure 5, and column 8, line 57, the database is queried for the status of the work process);

processing the job having be status associated with the work process (figure 5, and column 8, lines 54-56, the job is processed and its status is associated with the work process);

terminating processing of the database table if there are no further jobs in the database table having the status associated with the work process (see column 15, lines 5-17, when a database table containing a workflow list is finished and there are no new jobs associated with the workflow status, then the procedure is terminated); and

Art Unit: 2163

querying the database table for jobs after receiving the notification (see column 14, lines 19-25, after notification is received, the server uses the database to get the status).

As per claim 9, Flores et al. disclose all the limitations of the method of claim 8, wherein the work process spawns a work thread to process one job in the database table having the status associated with the work process, wherein the work process is capable of spawning multiple work threads to process different jobs having the status associated with the work process (see column 8, lines 31-69, and column 10, lines 16-21, the workflow process contains a status and once completed spawns multiple new work threads for the workflow).

As per claim 10, Flores et al. disclose all the limitations of the method of claim 1, wherein the job comprises a data file, wherein at least one work process processes the data file to alter its format and at least one other work process processes the data file in the altered format to transmit the work process to an output device (see column 7, lines 27-31, column 8, lines 14-30, and figure 4, the data can be formatted for different workflow processes and for outgoing transactions).

As per claim 11, Flores et al. disclose all the limitations of the method of claim 10, wherein at least two workers process the job at different devices in

Art Unit: 2163

communication over a network, further comprising accessing the job from another device over the network to process the job at the device on which that worker executes (see figure 5, and column 8 lines 64-67, through column 9, lines 1-4, the jobs, using different devices, communicate over the network).

As per claim 12, Flores et al. disclose all the limitations of the method of claim 1, further comprising: adding a status update to a list providing status updates for each job (see column 8, lines 31-35, the status of the workflow jobs are updated); and

using the list to determine how the job has been processed by the work processes (see column 5, lines 4-11, and column 8, lines 31-35, the database list shows the status of the work processed in the workflow).

As per claim 13, Flores et al. disclose the method a system for processing a job, comprising; means for generating a signal when status for the job is changed from a first status to a second status (see column 8, lines 31-315, the workflow transaction sends a signal to communicate to the server telling the database to update the status of the work, also see column 44, lines 35-42, the TxFormatter generates a signal to the STF Transaction that the formatting job is finished, once the workflow is completed the status can be updated);

means for notifying a work process associated with the second status that one job had its status changed to the second status in response to the signal

Art Unit: 2163

(see column 1, lines 41-42, and column 14, lines 19-26, the workflow processor is notified when the status changes);

means for processing, with the work process, the job that had its status changed from the first status to the second status (see column 8, lines 31-35, the workflow will be processed after the status is updated from the first status to the second status); and

means for modifying, with the work process, the status of the job after completing the processing of the job (see column 8, lines 31-35, the status will be modified when the work process job is completed).

As per claim 14, Flores et al. disclose all the limitations of the system of claim 13, wherein the signal is transmitted to a routing process and indicates the second status, further comprising: means for processing with the routing process a mapping associating each status with one work process in response to receiving the signal (see column 5, lines 26-28, the Business Process Map shows the relationship of the workflows, a signal is transmitted associated with the status of each workflow, when work process is completed the workflow goes to the next process as shown on the map); and

mean for determining from the mapping one work process associated with the second status, wherein the determined work process is notified of the job (see column 3, lines 62-67, through column 4, lines 1-11, and column 5, lines 26-

Art Unit: 2163

28, the mapping shows where the next work process occurs, notification occurs throughout any workflow process).

As per claim 15, Flores et al. disclose all the limitations of the system of claim 13, wherein job status is maintained in a database table including information on the job, further comprising means for maintaining, with the work process, a connection with the database that enables communication with the database table, wherein the means for modifying the status of the job after completing processing comprises updating the status of the job to an output status associated with another work process, and wherein the means for updating the status with the output status generates the signal indicating a change in status (see figure 5, column 8, lines 31-60, and column 10, lines 11-18, the workflow actions are communicated to the database and the status is changed, as a result of the action the status is changed and the workflow server is able to output the new status).

As per claim 16, Flores et al. disclose all the limitations of the system of claim 15, wherein the signal is generated by an event trigger in the database that responds to an update to the status of the job in the database table (see column 6, lines 26-31, column 7, lines 4-20, and column 8, lines 31-60, the workflow actions' new status is recorded in a database, the event trigger occurs because of the workflow action).

Art Unit: 2163

As per claim 17, Flores et al. disclose all the limitations of the system of claim 15, wherein there are multiple work processes each associated with one input status and at least one output status, wherein each worker is enabled to update the job status with one associated output status after completing the processing of the job, wherein the output status for one worker is the input status associated with one other worker, and wherein the definition of input and output statuses for workers defines the workflow of the job (see figure 5, column 8, lines 31-60, and column 14, lines 18-25, once a workflow is completed the status is updated and the new output status indicates the beginning of new work processes, the status defines the workflow of the job).

As per claim 18, Flores et al. disclose all the limitations of the system of claim 15, further comprising: means for determining whether the work process completed processing the job successfully (see column 12, lines 27-51, the Act transaction returns whether the job, or act, in the workflow process was successfully completed); and

means for updating the status of the job to an error status if the work process did not complete processing the job successfully, wherein the status of the job is updated with one output status associated with the work process if the job work process completed processing the job successfully (see column 12, lines 52-67, the Bind Data Transaction returns the successful or unsuccessful status of the workflow instance).

Art Unit: 2163

As per claim 19, Flores et al. disclose all the limitations of the system of claim 18, wherein an error worker is associated with the error status, wherein updating the job to the error status causes the notification of the error worker, further comprising: means for performing error recovery operations on the job (see column 12, lines 1-9, and column 24, lines 35-40, an error message is displayed on the screen, an error worker receives this message and must perform error recovery so that the work processes continue);

means for determining whether the error recovery operations corrected the job (see column 24, lines 35-50, once the error recovery is completed no error notification will be received, the workflow process will continue); and

means for setting the jobs status of the corrected job to a first possible status in the workflow (see column 24, lines 35-50, the status of the workflow is returned once the error is corrected).

As per claim 20, Flores et al. disclose all the limitations of the system of claim 15, further comprising: means for querying the database table for jobs having the status associated with the work process (see figure 5, and column 8, line 57, the database is queried for the status of the work process);

means for processing the job having the status associated with the work process (figure 5, and column 8, lines 54-56, the job is processed and its status is associated with the work process);

means for terminating processing of the database table if there are no further jobs in the database table having the status associated with the work process (see

Art Unit: 2163

column 15, lines 5-17, when a database table containing a workflow list is finished and there are no new jobs associated with the workflow status, then the procedure is terminated); and

means for querying the database table for jobs after receiving the notification (see column 14, lines 19-25, after notification is received, the server uses the database to get the status).

As per claim 21, Flores et al. disclose all the limitations of the system of claim 20, wherein the work process spawns a work thread to process one job in the database table having the status associated with the work process, and wherein the work process is capable of spawning multiple work threads to process different jobs having the status associated with the work process (see column 8, lines 31-69, and column 10, lines 16-21, the workflow process contains a status and once completed spawns multiple new work threads for the workflow).

As per claim 22 all the limitations of the system of claim 13, wherein the job comprises a data file, wherein at least one work process processes the data file to alter its format and at least one other work process processes the data file in the altered format to transmit the work process to an output device (see column 7, lines 27-31, column 8, lines 14-30, and figure 4, the data can be formatted for different workflow processes and for the outgoing transactions).

Art Unit: 2163

As per claim 23, Flores et al. disclose all the limitations of the system of claim 22, wherein at least two workers process the job at different devices in communication over a network, further comprising means for accessing the job from another device over the network to process the job at the device on which that worker executes (see figure 5, and column 8 lines 64-67, through column 9, lines 1-4, the jobs, using different devices, communicate over the network).

As per claim 24, Flores et al. disclose all the limitations of the system of claim 13, further comprising:means for adding a status update to a list providing status updates for each job (see column 8, lines 31-35, the status of the workflow jobs are updated); and

means for using the list to determine how the job has been processed by the work processes (see column 5, lines 4-11, and column 8, lines 31-35, the database list shows the status of the work processed in the workflow).

As per claim 25, Flores et al. disclose an article of manufacture for processing a job, the article of manufacture comprising computer usable media including at least one computer program and at least one work process embedded therein that causes at least one computer to perform:

generating a signal when status for the job is changed from a first status to a second status (see column 8, lines 31-315, the workflow transaction sends a signal to communicate to the server telling the database to update the status of the work, also

Art Unit: 2163

see column 44, lines 35-42, the TxFormatter generates a signal to the STF Transaction that the formatting job is finished, once the workflow is completed the status can be updated);

notifying a work process associated with the second status that one job had its status changed to the second status in response to the signal (see column 1, lines 41-42, and column 14, lines 19-26, the workflow processor is notified when the status changes);

processing, with the work process, the job that had its status changed from the first status to the second status (see column 8, lines 31-35, the workflow will be processed after the status is updated from the first status to the second status); and modifying, with the work process, the status of the job after completing the processing of the job (see column 8, lines 31-35, the status will be modified when the work process job is completed).

As per claim 26, Flores et al. disclose all the limitations of the article of manufacture of claim 25, wherein the signal is transmitted to a routing process and indicates the second status, further comprising: processing with the routing process a mapping associating each status with one work process in response to receiving the signal (see column 5, lines 26-28, the Business Process Map shows the relationship of the workflows, a signal is transmitted associated with the status of each workflow, when work process is completed the workflow goes to the next process as shown on the map); and

Page 17

Application/Control Number: 09/398,378

**Art Unit: 2163** 

determining from the mapping one work process associated with the second status, wherein the determined work process is notified of the job (see column 3, lines 62-67, through column 4, lines 1-11, and column 5, lines 26-28, the mapping shows where the next work process occurs, notification occurs throughout any workflow process).

As per claim 27, Flores et al. disclose all the limitations of the article of manufacture of claim 25, wherein job status is maintained in a database table including information on the job, further comprising maintaining, with the work process, a connection with the database that enables communication with the database table, wherein modifying the status of the job after completing processing comprises updating the status of the job to an output status associated with another work process, and wherein updating the status with the output status generates the signal indicating a change in status (see figure 5, column 8, lines 31-60, and column 10, lines 11-18, the workflow actions are communicated to the database and the status is changed, as a result of the action the status is changed and the workflow server is able to output the new status).

As per claim 28, Flores et al. disclose all the limitations of the article of manufacture of claim 27, wherein the signal is generated by an event trigger in the database that responds to an update to the status of the job in the database table (see column 6, lines 26-31, column 7, lines 4-20, and column 8, lines 31-60, the workflow

Art Unit: 2163

actions' new status is recorded in a database, the event trigger occurs because of the workflow action).

As per claim 29, Flores et al. disclose all the limitations of the article of manufacture of claim 27, wherein there are multiple work processes each associated with one input status and at least one output status, wherein each worker is enabled to update the job status with one associated output status after completing the processing of the job, wherein the output status for one worker is the input status associated with one other worker, and wherein the definition of input and output statuses for workers defines the workflow of the job (see figure 5, column 8, lines 31-60, and column 14, lines 18-25, once a workflow is completed the status is updated and the new output status indicates the beginning of new work processes, the status defines the workflow of the job).

As per claim 30, Flores et al. disclose all the limitations of the article of manufacture of claim 27, further comprising the work process performing: determining whether the work process completed processing the job successfully (see column 12, lines 27-51, the Act transaction returns whether the job, or act, in the workflow process was successfully completed); and

updating the status of the job to an error status if the work process did not complete processing the job successfully, wherein the status of the job is updated with one output status associated with the work process if the job work process completed

Art Unit: 2163

378. <sub>i.</sub> Page 19

processing the job successfully (see column 12, lines 52-67, the Bind Data Transaction returns the successful or unsuccessful status of the workflow instance).

As per claim 31, Flores et al. disclose all the limitations of the article of manufacture of claim 30, wherein one worker process is an error worker is associated with the error status, wherein updating the job to the error status causes the notification of the error worker, further comprising the error worker performing: error recovery operations on the job (see column 12, lines 1-9, and column 24, lines 35-40, an error message is displayed on the screen, an error worker receives this message and must perform error recovery so that the work processes continue);

determining whether the error recovery operations corrected the job (see column 24, lines 35-50, once the error recovery is completed no error notification will be received, the workflow process will continue); and

setting the jobs status of the corrected job to a first possible status in the workflow (see column 24, lines 35-50, the status of the workflow is returned once the error is corrected).

As per claim 32, Flores et al. disclose all the limitations of the article of manufacture of claim 27, wherein the work process further performs:

querying the database table for jobs having the status associated with the work process (see figure 5, and column 8, line 57, the database is queried for the status of the work process);

Art Unit: 2163

processing the job having the status associated with the work process (figure 5, and column 8, lines 54-56, the job is processed and its status is associated with the work process);

terminating processing of the database table if there are no further jobs in the database table having the status associated with the work process(see column 15, lines 5-17, when a database table containing a workflow list is finished and there are no new jobs associated with the workflow status, then the procedure is terminated); and

querying the database table for jobs after receiving the notification (see column 14, lines 19-25, after notification is received, the server uses the database to get the status).

As per claim 33, Flores et al. disclose all the limitations of the article of manufacture of claim 32, wherein the work process spawns a work thread to process one job in the database table having the status associated with the work process, wherein the work process is capable of spawning multiple work threads to process different jobs having the status associated with the work process (see column 8, lines 31-69, and column 10, lines 16-21, the workflow process contains a status and once completed spawns multiple new work threads for the workflow).

As per claim 34, Flores et al. disclose the article of manufacture of claim 25, wherein the job comprises a data file, wherein at least one work process processes the

Art Unit: 2163

data file to alter its format and at least one other work process processes the data file in the altered format to transmit the work process to an output device (see column 7, lines 27-31, column 8, lines 14-30, and figure 4, the data can be formatted for different workflow processes and for the outgoing transactions).

As per claim 35, Flores et al. disclose all the limitations of the article of manufacture of claim 34, wherein at least two workers process the job at different devices in communication over a network, further comprising accessing the job from another device over the network to process the job at the device on which that worker executes (see figure 5, and column 8 lines 64-67, through column 9, lines 1-4, the jobs, using different devices, communicate over the network).

As per claim 36, Flores et al. disclose all the limitations of the article of manufacture of claim 25, further comprising: adding a status update to a list providing status updates for each job (see column 8, lines 31-35, the status of the workflow jobs are updated); and

using the list to determine how the job has been processed by the work processes (see column 5, lines 4-11, and column 8, lines 31-35, the database list shows the status of the work processed in the workflow).

Art Unit: 2163

Page 22

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rosenthal et al. (P.N. 6,311,192) discuss a computer program that interacts with a database using a workflow process.

Haverstock et al. (P.N. 6,301,621) discusses database system that finds and returns documents.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rebecca Bachner whose telephone number is 703-305-1872. The examiner can normally be reached Monday - Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 703-305-9643.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

703-746-7238 [After Final Communication]

703-746-7239 [Official Communications]

703-746-7240 [For status inquiries, draft communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

RMB January 4, 2002

TARIO R) HAFIZ SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100